Forest Sector Workgroup — Draft Recommendations

Creating Urban Forests to Address Climate Change

October 8, 2008

BACKGROUND

Urban Forests reduce CO2

Increasing levels of carbon dioxide and other greenhouse gases (GHG) in the atmosphere are of growing concern globally and locally, and urban forests can play a role in the fight against climate change. Urban forests allow local jurisdictions to permanently increase carbon storage in trees. Urban forests reduce atmospheric carbon dioxide directly and indirectly. As long as trees are growing, they directly remove CO2 from the air, sequestering it to build living matter—leaves, stems, trunk, roots. Urban forests have indirect effects on atmospheric CO2 and other greenhouse gases. Trees around buildings can reduce heating and air conditioning use, thereby reducing emissions of GHGs associated with the consumption of electricity, natural gas, and fuel oil.

Urban trees also provide many co-benefits that are not necessarily climate-related, such as providing habitat for birds and other wildlife, providing aesthetic value, and increasing property values.

California's Urban Forest protocols

Through its Climate Action Reserve Program, the California Climate Action Registry supplies protocols to quantify GHG emission reductions (or offsets). In August 2008, the California Registry released two protocols[1]—developed by the US Forest Service, Pacific Southwest Research Station, Center for Urban Forest Research—that describe, in detail, how to create, maintain, calculate, and verify urban forest projects. The protocols clearly define project sites and boundaries; ownership (municipality, educational institution, utility, and/or a person/organization working in partnership with any of the entities); issues regarding additionality, leakage, complying with existing regulation; GHG assessment boundaries and

[1] California Climate Action Registry, August 2008. *Urban Forest Project Reporting Protocol*, Version 1.0. California Climate Action Registry, August 2008. *Urban Forest Project Verification Protocol*, Version 1.0. See http://www.climateregistry.org/tools/protocols/project-protocols.html.

reduction calculation methods; quantifying CO2 sequestration; permanence of a project for 100 years; and finally, on-going tree monitoring and maintenance plans. The Reserve oversees and accredits independent third-party verifiers. Meeting these Protocol requirements allows the site to qualify for offsets.

The California Registry supports projects that yield surplus GHG reductions. These reductions are additional to what might otherwise have occurred—the reductions are above and beyond business as usual. Projects satisfy the "additionality" eligibility rule by passing a Performance Standard Test. The test establishes a threshold where projects exceed business as usual practices and generate surplus/additional GHG reduction.

Washington State's Urban Forest Program

The 2008 Legislature established a statewide "Evergreen Communities" urban forest program (E2SHB 2844) to increase the environmental and social benefits from urban forests. The legislature appropriated funds to the Department of Community Trade and Economic Development (CTED) and Department of Natural Resources (DNR) to:

- research existing urban forests programs
- develop a model ordinance for local government
- develop criteria which could qualify local governments for future funding
- assess and inventory two counties' urban forests
- create model on how to conduct such inventories

The Forest Sector Workgroup encourages CTED and DNR to include amended California Protocols as part of the new Urban Forest program in Washington (see recommendations below).

For local governments to participate in an urban forestry program to address climate change, their staff will need to become expert in urban forests and carbon emission protocols. Local funding is limited for this purpose and must be supplemented with state or federal grant funds. Therefore, the Workgroup supports legislative funding for a grants program within CTED for local governments to create urban forest program.

Terminology

The Forest Sector Workgroup recommends using the concept of "reforestation" which is the planting of trees where they have been historically or traditionally found. Reforestation does not include tree planting required under Washington's Forest Practices Board regulations. Rather, our working group focused on reforestation in Urban Growth Areas[2]. *Urban Forest* protocols, as referenced in this document, are used for tree planting programs within Urban Growth Areas, whereas *Forest Management* protocols are used to create forest stands. Projects intending to grow trees for carbon credit on agricultural lands should use the Forest Management Protocols.

Afforestation is a valid form of carbon sequestration, but there is a wide range of opinion about its applicability in Washington State, and the Workgroup believes there are limited applications of the concept in the state. Instead, the Workgroup used the term "reforestation" with reference to urban settings, as described above.

RECOMMENDATIONS:

Therefore, based on the background information presented above, the Forest Sector Workgroup makes the following recommendations:

1. Washington State should establish policies and programs to give local jurisdictions incentives to inventory, increase, and maintain urban forests.

2. The Workgroup supports legislative funding for a grants program to build capacity for local governments to create urban forest programs.[3]

3. Washington State should develop an Urban Forest protocol that allows urban forest programs to qualify for carbon credits. The California Climate Action Registry's Urban

[2] "Urban growth areas" means those areas designated by a county pursuant to RCW 36.70A.110.

[3] The Workgroup estimates that roughly $2 million would be needed for a grants program. The program would be a "needs-based grant and competitive awards program to provide financial assistance to cities, towns, and counties for the development, adoption, or implementation of appropriate management plans or ordinances developed" (E2SHB 2844, Section 9) by the Evergreen Communities act. The goal is to "reward innovation by a successful evergreen community and provide resources and assistance to the applicants with the greatest financial need" (E2SHB 2844, Section 9). This is based on an assumption that 20 local governments could participate, and receive as much as $100,000 per local government. A modest percentage would need to be added for state administration and oversight.

Forest Project Reporting (and Verification) Protocols (as of August 2008) should be used as a starting point and should be amended to apply to Washington based on the following guidelines:

a. The local jurisdiction would not be required to account for carbon emissions during the creation and maintenance of the project. We recommend this because we anticipate that these emissions will be accounted for under the transportation sector of the Western Climate Initiative.
b. The California protocol's appendix and equations should be reviewed by DNR's urban forest program for their applicability to Washington State. If DNR finds that the protocol's appendix and equations (e.g. tree growth tables) should be amended to meet Washington's ecosystems, then DNR should develop appropriate appendix and equations for Washington.
c. The amended California protocols should be applied to urban forest lands as defined in RCW 76.15.010[4] and the amended protocols would apply to public and private lands in Washington, as compared to municipalities, utilities and educational institutions in California.
d. Once amended, the protocol should be used to account for and report greenhouse gas emissions in Washington's urban forests.

4. Washington's Department of Community, Trade and Economic Development (CTED) and the Department of Natural Resources (DNR), should integrate the California protocols, as amended to apply to Washington, into the design of their urban forest programs.

[4] "Urban forest lands" are defined in RCW 76.15.010:
"Community and urban forest" is that land in and around human settlements ranging from small communities to metropolitan areas, occupied or potentially occupied by trees and associated vegetation. Community and urban forest land may be planted or unplanted, used or unused, and includes public and private lands, lands along transportation and utility corridors, and forested watershed lands within populated areas.